

Abstract Submitted
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Precise Double-Photoionization Data for Na and K¹ P.N. JURANIĆ, Synchrotron Radiation Center, Univ. of Wisconsin-Madison, J.C. NORDBERG², Gustavus Adolphus College, St. Peter, MN, R. WEHLITZ, Synchrotron Radiation Center, Univ. of Wisconsin-Madison — We have measured precise double-to-single photoionization ratios and double-photoionization cross-sections of sodium and potassium near threshold. A previously discovered scaling law³ allows us to conveniently compare the energy dependence of the double-to-single photoionization ratio by scaling the energy axis. Recently, we have also found a scaling law that enables us to predict the absolute double-to-single photoionization ratio⁴. We have applied this scaling law to our new data and found excellent agreement. Previous tests of this scaling law were limited to systems where electrons were emitted from *s*-shells. However, in the cases of Na and K a *p* electron is participating in the double-ionization process. Interestingly and in spite of the different orbital, the scaling law is still valid.

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